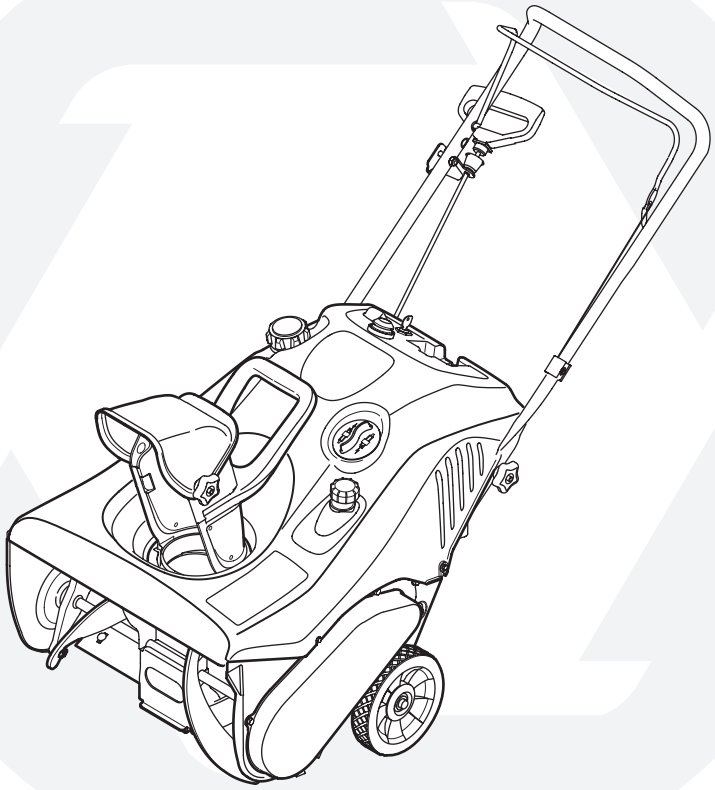
OPERATOR'S MANUAL

TROY-BILT®



Model 5521
Squall

Single-Stage Snow Thrower

IMPORTANT

READ SAFETY RULES AND INSTRUCTIONS CAREFULLY BEFORE OPERATION

Warning: This unit is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator. In the State of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands. A spark arrester for the muffler is available through your nearest engine authorized service dealer or contact the service department, P.O. Box 361131 Cleveland, Ohio 44136-0019.

PRINTED IN U.S.A.

TROY-BILT LLC, P.O. BOX 361131 CLEVELAND, OHIO 44136-0019

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6/06/2006

This Operator's Manual is an important part of your new snow thrower. It will help you assemble, prepare and maintain the unit for best performance. Please read and understand what it says.

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Finding and Recording Model Number

BEFORE YOU START ASSEMBLING
YOUR NEW EQUIPMENT,
please locate the model plate on the equipment and copy the information to the sample model plate provided to the right. You can locate the model plate by standing at the operating position and looking down at the rear of the snow thrower. This information will be necessary to use the manufacturer's web site and/or obtain assistance from the Customer Support Department or an authorized service dealer.

TROY-BILT®
www.troybilt.com

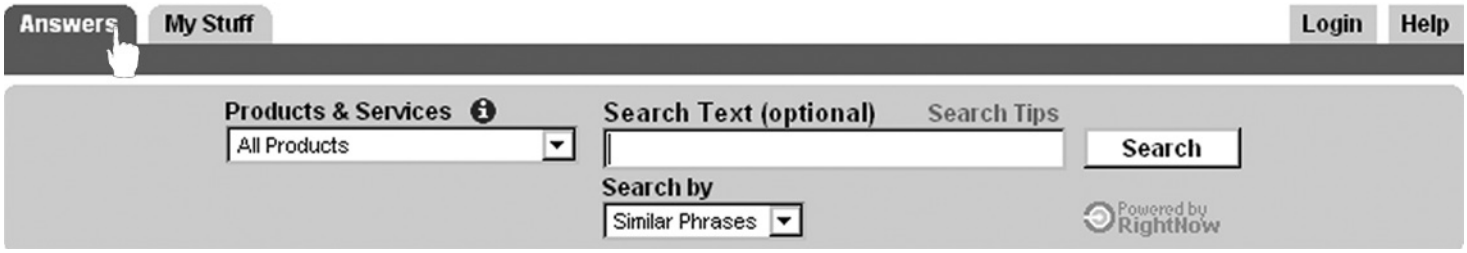
TROY-BILT LLC
P. O. BOX 361131
CLEVELAND, OH 44136
330-558-7220
866-840-6483

Customer Support

Please do *NOT* return the unit to the retailer from which it was purchased, without first contacting Customer Support.

If you have difficulty assembling this product or have any questions regarding control, operation, or maintenance, you can seek help from the experts. Choose from the options below:

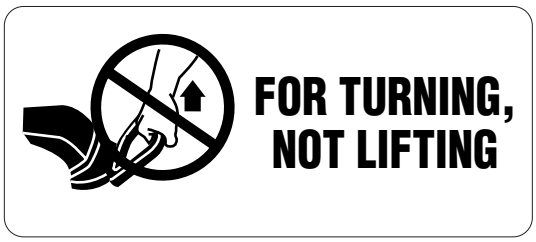
- Visit **www.troybilt.com**

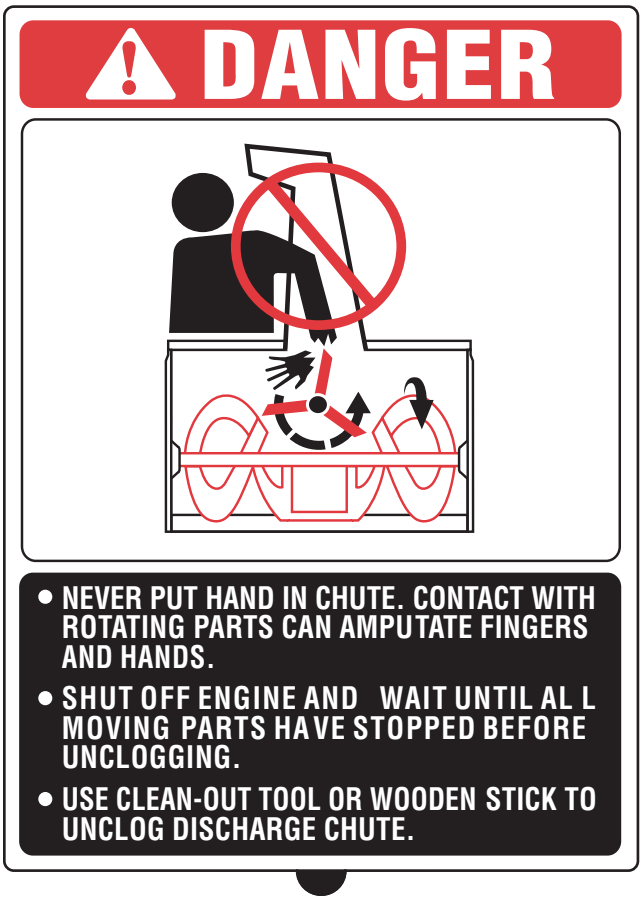


- Call a Customer Support Representative at **1-866-840-6483**.
- The **engine manufacturer** is responsible for all engine-related issues with regard to performance, power-rating, specifications, warranty, and service. Please refer to the engine manufacturer's Owner's/Operator's Manual, packed separately with your unit, for more information.

1

Safety Labels




DANGER
• NEVER PUT HAND IN CHUTE. CONTACT WITH ROTATING PARTS CAN AMPUTATE FINGERS AND HANDS.
• SHUT OFF ENGINE AND WAIT UNTIL ALL MOVING PARTS HAVE STOPPED BEFORE UNCLOGGING.
• USE CLEAN-OUT TOOL OR WOODEN STICK TO UNCLOG DISCHARGE CHUTE.

AVOID INJURY FROM ROTATING AUGER - KEEP HANDS, FEET AND CLOTHING AWAY.
DANGER
DANGER
1. KEEP AWAY FROM ROTATING AUGER CONTACT WITH AUGER CAN AMPUTATE HANDS AND FEET.
2. DISENGAGE CLUTCH LEVERS, STOP ENGINE, AND REMAIN BEHIND HANDLES UNTIL ALL MOVING PARTS HAVE STOPPED BEFORE UNCLOGGING OR SERVICING MACHINE.
3. TO AVOID THROWN OBJECTS INJURIES, NEVER DIRECT DISCHARGE AT BYSTANDERS. USE EXTRA CAUTION WHEN OPERATING ON GRAVEL SURFACES.
4. READ OPERATOR'S MANUAL.

WARNING

This symbol points out important safety instructions which, if not followed, could endanger the personal safety and/or property of yourself and others. Read and follow all instructions in this manual before attempting to operate this machine. Failure to comply with these instructions may result in personal injury. When you see this symbol.

HEED ITS WARNING!

Your Responsibility
Restrict the use of this power machine to persons who read, understand and follow the warnings and instructions in this manual and on the machine.

2

Safe Operation Practices

WARNING

This symbol points out important safety instructions which, if not followed, could endanger the personal safety and/or property of yourself and others. Read and follow all instructions in this manual before attempting to operate this machine. Failure to comply with these instructions may result in personal injury. When you see this symbol.

HEED ITS WARNING!

Your Responsibility
Restrict the use of this power machine to persons who read, understand and follow the warnings and instructions in this manual and on the machine.

WARNING: Engine Exhaust, some of its constituents, and certain vehicle components contain or emit chemicals known to State of California to cause cancer and birth defects or other reproductive harm.

DANGER: This machine was built to be operated according to the rules for safe operation in this manual. As with any type of power equipment, carelessness or error on the part of the operator can result in serious injury. This machine is capable of amputating hands and feet and throwing objects. Failure to observe the following safety instructions could result in serious injury or death.

Training

1. Read, understand, and follow all instructions on the machine and in the manual(s) before attempting to assemble and operate. Keep this manual in a safe place for future and regular reference and for ordering replacement parts.
2. Be familiar with all controls and their proper operation. Know how to stop the machine and disengage them quickly.
3. Never allow children under 14 years old to operate this machine. Children 14 years old and over should read and understand the operation instructions and safety rules in this manual and should be trained and supervised by a parent.
4. Never allow adults to operate this machine without proper instruction.
5. Thrown objects can cause serious personal injury. Plan your snow-throwing pattern to avoid discharge of material toward roads, bystanders and the like.
6. Keep bystanders, helpers, pets and children at least 75 feet from the machine while it is in operation. Stop machine if anyone enters the area.
7. Exercise caution to avoid slipping or falling, especially when operating in reverse.

Preparation

1. Thoroughly inspect the area where the equipment is to be used. Remove all doormats, newspapers, sleds, boards, wires and other foreign objects, which could be tripped over or thrown by the auger/impeller.
2. Always wear safety glasses or eye shields during operation and while performing an adjustment or repair to protect your eyes. Thrown objects which ricochet can cause serious injury to the eyes.
3. Do not operate without wearing adequate winter outer garments. Do not wear jewelry, long scarves or other loose clothing, which could become entangled in moving parts. Wear footwear which will improve footing on slippery surfaces.
4. Use a grounded three-wire extension cord and receptacle for all units with electric start engines.
5. Adjust collector housing height to clear gravel or crushed rock surfaces.
6. Disengage all control levers before starting the engine.
7. Never attempt to make any adjustments while engine is running, except where specifically recommended in the operator's manual.
8. Let engine and machine adjust to outdoor temperature before starting to clear snow.
9. To avoid personal injury or property damage use extreme care in handling gasoline. Gasoline is extremely flammable and the vapors are explosive. Serious personal injury can occur when gasoline is spilled on yourself or your clothes, which can ignite. Wash your skin and change clothes immediately.
   a. Use only an approved gasoline container.
   b. Extinguish all cigarettes, cigars, pipes and other sources of ignition.
   c. Never fuel machine indoors.
   d. Never remove gas cap or add fuel while the engine is hot or running.
   e. Allow engine to cool at least two minutes before refueling.
   f. Never over fill fuel tank. Fill tank to no more than ½ inch below bottom of filler neck to provide space for fuel expansion.
   g. Replace gasoline cap and tighten securely.
   h. If gasoline is spilled, wipe it off the engine and equipment. Move machine to another area. Wait 5 minutes before starting the engine.
   i. Never store the machine or fuel container inside where there is an open flame, spark or pilot light (e.g. furnace, water heater, space heater, clothes dryer etc.).
   j. Allow machine to cool at least 5 minutes before storing.

Operation

1. Do not put hands or feet near rotating parts, in the auger/impeller housing or chute assembly. Contact with the rotating parts can amputate hands and feet.
2. The auger/impeller control lever is a safety device. Never bypass its operation. Doing so makes the machine unsafe and may cause personal injury.
3. The control levers must operate easily in both directions and automatically return to the disengaged position when released.
4. Never operate with a missing or damaged chute assembly. Keep all safety devices in place and working.
5. Never run an engine indoors or in a poorly ventilated area. Engine exhaust contains carbon monoxide, an odorless and deadly gas.
6. Do not operate machine while under the influence of alcohol or drugs.
7. Muffler and engine become hot and can cause a burn. Do not touch.
8. Exercise extreme caution when operating on or crossing gravel surfaces. Stay alert for hidden hazards or traffic.
9. Exercise caution when changing direction and while operating on slopes.
10. Plan your snow-throwing pattern to avoid discharge towards windows, walls, cars etc. Thus, avoiding possible property damage or personal injury caused by a ricochet.
11. Never direct discharge at children, bystanders and pets or allow anyone in front of the machine.
12. Do not overload machine capacity by attempting to clear snow at too fast of a rate.
13. Never operate this machine without good visibility or light. Always be sure of your footing and keep a firm hold on the handles. Walk, never run.
14. Disengage power to the auger/impeller when transporting or not in use.
15. Never operate machine at high transport speeds on slippery surfaces. Look down and behind and use care when backing up.
16. If the machine should start to vibrate abnormally, stop the engine, disconnect the spark plug wire and ground it against the engine. Inspect thoroughly for damage. Repair any damage before starting and operating.
17. Disengage all control levers and stop engine before you leave the operating position (behind the handles). Wait until the auger/impeller comes to a complete stop before unclogging the chute assembly, making any adjustments, or inspections.
18. Never put your hand in the discharge or collector openings. Always use the clean-out tool provided to unclog the discharge opening. Do not unclog chute assembly while engine is running. Shut off engine and remain behind handles until all moving parts have stopped before unclogging.
19. Use only attachments and accessories approved by the manufacturer (e.g. wheel weights, tire chains, cabs etc.).
20. If situations occur which are not covered in this manual, use care and good judgment. Contact your local authorized service dealer.

Maintenance & Storage

1. Never tamper with safety devices. Check their proper operation regularly. Refer to the maintenance and adjustment sections of this manual.
2. Before cleaning, repairing, or inspecting machine disengage all control levers and stop the engine. Wait until the auger/impeller come to a complete stop. Disconnect the spark plug wire and ground against the engine to prevent unintended starting.
3. Check bolts and screws for proper tightness at frequent intervals to keep the machine in safe working condition. Also, visually inspect machine for any damage.
4. Do not change the engine governor setting or over-speed the engine. The governor controls the maximum safe operating speed of the engine.
5. Snow thrower shave plates and skid shoes are subject to wear and damage. For your safety protection, frequently check all components and replace with original equipment manufacturer's (OEM) parts only. "Use of parts which do not meet the original equipment specifications may lead to improper performance and compromise safety!"
6. Check controls periodically to verify they engage and disengage properly and adjust, if necessary. Refer to the adjustment section in this operator's manual for instructions.
7. Maintain or replace safety and instruction labels, as necessary.
8. Observe proper disposal laws and regulations for gas, oil, etc. to protect the environment.
9. Prior to storing, run machine a few minutes to clear snow from machine and prevent freeze up of auger/impeller.
10. Never store the machine or fuel container inside where there is an open flame, spark or pilot light such as a water heater, furnace, clothes dryer etc.
11. Always refer to the operator's manual for proper instructions on off-season storage.

Do not modify engine

To avoid serious injury or death, do not modify engine in any way. Tampering with the governor setting can lead to a runaway engine and cause it to operate at unsafe speeds. Never tamper with factory setting of engine governor.

Notice regarding Emissions

Engines which are certified to comply with California and federal EPA emission regulations for SORE (Small Off Road Equipment) are certified to operate on regular unleaded gasoline, and may include the following emission control systems: Engine Modification (EM) and Three Way Catalyst (TWC) if so equipped.

Your Responsibility

Restrict the use of this power machine to persons who read, understand and follow the warnings and instructions in this manual and on the machine.

2

Safe Operation Practices

WARNING

This symbol points out important safety instructions, which if not followed, could endanger the personal safety and/or property of yourself and others. Read and follow all instructions in this manual before attempting to operate this machine. Failure to comply with these instructions may result in personal injury. When you see this symbol.

HEED IT'S WARNING!

Your Responsibility

Restrict the use of this power machine to persons who read, understand and follow the warnings and instructions in this manual and on the machine.

3

Snow Thrower Setup

NOTE:
This Operator's Manual covers several models. Snow thrower features vary by model. Not all features discussed in this manual are applicable to all snow thrower models.

NOTE:
All references to left or right side of the snow thrower is from the operating position only.

IMPORTANT:
Do not use the chute handle to lift the snow thrower.

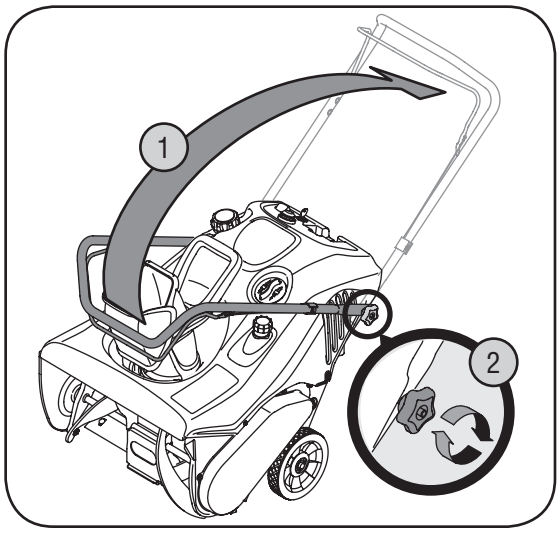


Figure 3-1

Figure 3-2

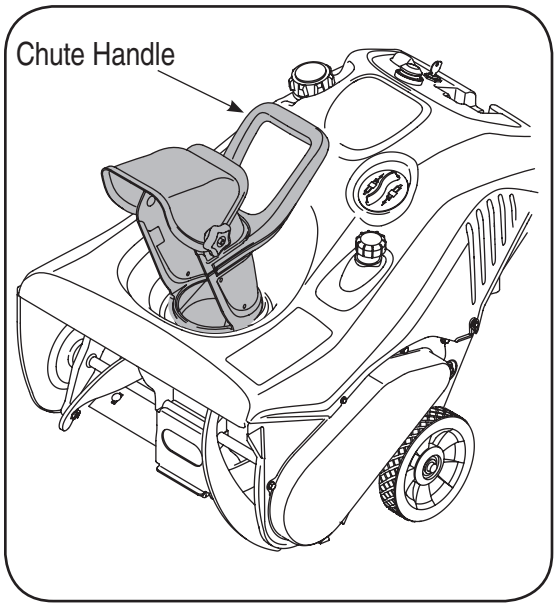


Figure 3-3

NOTE: This Operator's Manual covers several models. Snow thrower features vary by model. Not all features discussed in this manual are applicable to all snow thrower models.

NOTE: All references to left or right side of the snow thrower is from the operating position only

Contents of Carton

Carton contents are listed below with part numbers in parentheses.

1. Two Ignition Keys (725-0201)
2. 20 oz. Bottle 5-30W Oil (737-0209)
3. Extension Cord (if so equipped) (629-0071)

WARNING: Disconnect the spark plug wire and ground it against the engine to prevent unintended starting.

Positioning the Upper Handle

NOTE: Remove packing material, if present.

1. Making sure not to pinch the cable in the process, pivot the upper handle into the operating position as illustrated in Figure 3-1 until it clicks into place.
2. Tighten the wing knobs to secure the handle in place as in Figure 3-1.

Assembling the Discharge Chute

For shipping reasons, the snow thrower has been packaged with the upper chute pivoted all the way down. To pivot it upward, proceed as follows:

NOTE: Turn the chute until the chute opening is facing straight ahead.

1. Remove the wing knob, flat washer and carriage bolt from the lower chute. See Figure 3-2.
2. Pivot the upper chute upward over the lip on the lower chute so that there is NO gap between the upper chute and the lower chute.
3. Re-secure with the hardware just removed. If installed correctly, your snow thrower should look like Figure 3-3.

IMPORTANT: Do not use the chute handle to lift the snow thrower

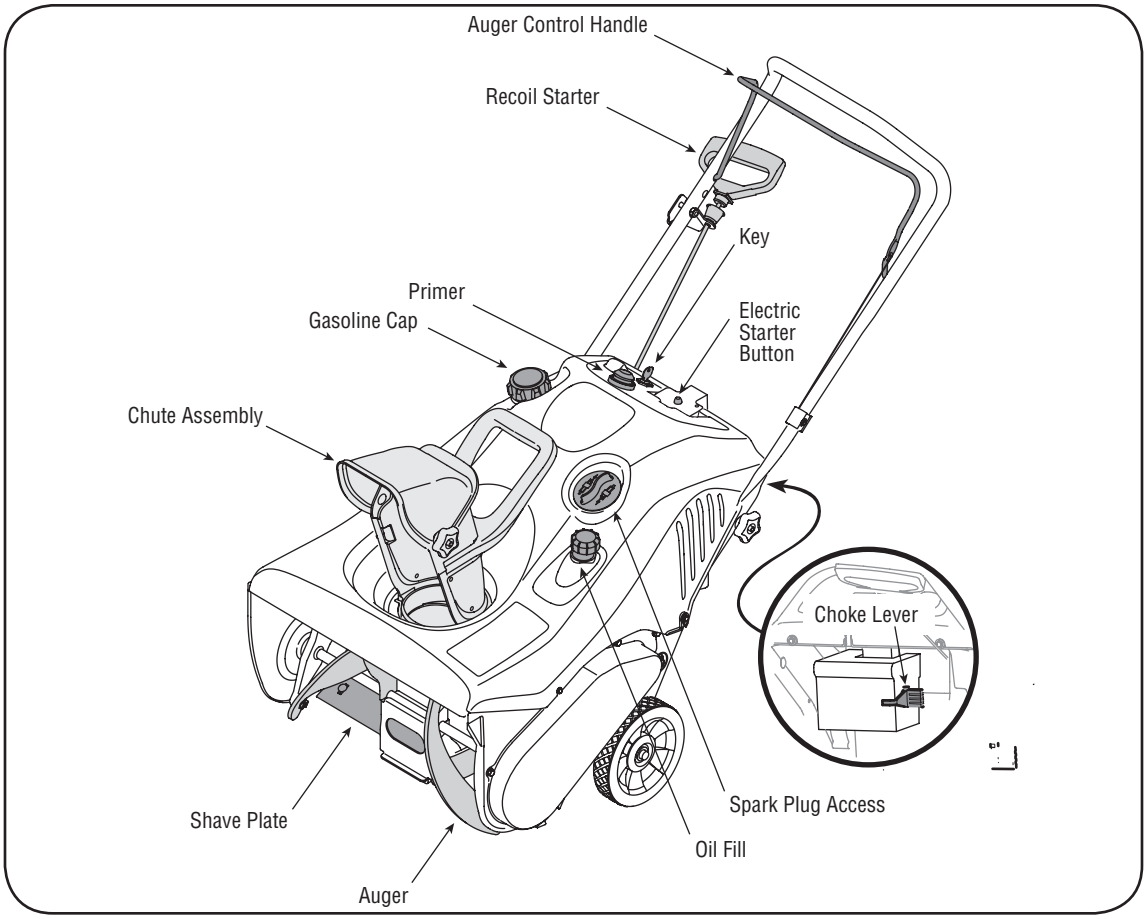


Figure 4-1

4

Know Your Snow Thrower

IMPORTANT:
This unit is shipped without oil in the engine. Oil is packaged separately with this unit and must be added per the engine owner's manual instructions.

NOTE:
This unit may include a fuel plug, which is only used during assembly to keep dirt and debris out of fuel tank. Discard the fuel plug before filling the fuel tank.

Choke Lever

Activating choke control closes the choke plate on carburetor and aids in starting engine. Refer to the engine manual packed with unit for more detailed instructions.

Primer

Depressing primer forces fuel directly into engine's carburetor to aid in cold-weather starting. Refer to engine manual packed with unit for more detailed instructions.

Ignition Key

Ignition key must be present, inserted in key switch, and in the "ON" position for engine to start.

Recoil Starter

The starter handle is used to manually start the engine.

Electric Starter Button *(If so equipped)*

Pressing the electric starter button engages the engine's electric starter when plugged into a 120V power source

Electric Starter Plug *(If so equipped)*

Requires use of a two-prong outdoor extension cord (packed with the snow thrower) and a 120V power source/wall outlet.

Spark Plug Cover

Remove spark plug cover to access spark plug.

Auger

When engaged, the augers rotation draws snow into the auger housing and throws it out the discharge chute. Rubber paddles on the augers also aid in propelling the unit as they come in contact with the pavement.

Auger Control Handle

Located on the upper handle, the auger control handle is used to engage and disengage drive to the auger. Squeeze the control handle against the upper handle to engage auger; release it to disengage.

Discharge Chute / Chute Handle

Rotate the discharge chute to the left or right using chute handle. Pitch of the discharge chute controls angle at which the snow is thrown. Loosen wing knob on side of the discharge chute before pivoting discharge chute upward or downward. Retighten the knob once desired position has been achieved.

Shave Plate

The shave plate maintains contact with pavement as the snow thrower is propelled, allowing snow close to pavement's surface to be discharged.

Gasoline Cap

Remove gas cap to add fuel. Unit runs on regular gas.

Oil Fill

Remove cap to add oil. Refer to engine owner's manual packed with this unit for instructions on adding oil.

5

Operation

WARNING

WARNING:
Read, understand, and follow all instructions and warnings on the machine and in this manual before operating.

Use extreme care when handling gasoline. Gasoline is extremely flammable and the vapors are explosive. Never fuel the machine indoors or while the engine is hot or running. Extinguish cigarettes, cigars, pipes and other sources of ignition.

The electric starter must be used with a properly grounded three-prong receptacle at all times to avoid the possibility of electric shock. Follow all instructions carefully prior to operating the electric starter.

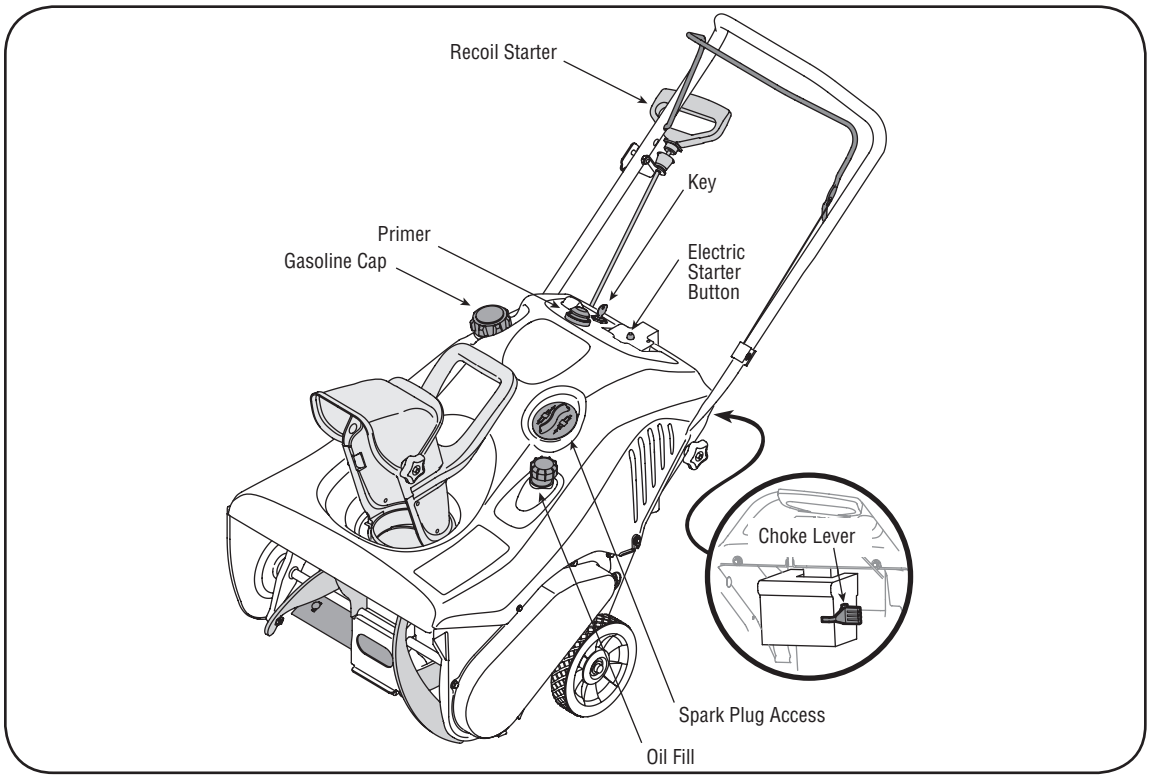


Figure 5-1

Before Starting

WARNING: Read, understand, and follow all instructions and warnings on the machine and in this manual before operating.

IMPORTANT: For complete and detailed engine starting, stopping and storing instructions, it is recommended that you read the engine manual also included with this unit.

1. The spark plug wire was disconnected for safety. Attach spark plug wire to spark plug before starting.

Gas and Oil Fill-Up

1. Check oil and gasoline level and add if necessary. Follow related instructions in the separate engine manual packed with your snow thrower.

WARNING: Use extreme care when handling gasoline. Gasoline is extremely flammable and the vapors are explosive. Never fuel the machine indoors or while the engine is hot or running. Extinguish cigarettes, cigars, pipes and other sources of ignition.

To Start Engine

1. To avoid carbon monoxide poisoning, make sure engine is outdoors in a well-ventilated area.
2. Insert ignition key into slot. Turn key to ON position.
3. Now follow the instructions below as it pertains to your unit. See Figure 5-1 for location of controls.

Electric Starter *(if so equipped)*

WARNING: The electric starter must be used with a properly grounded three-prong receptacle at all times to avoid the possibility of electric shock. Follow all instructions carefully prior to operating the electric starter.

1. The electric starter is equipped with a grounded three-wire power cord and plug, and is designed to operate on 120 volt AC household current.
2. Determine that your house wiring is a three-wire grounded system. Ask a licensed electrician if you are not certain.
3. **If your home wiring system is not a three-wire grounded system,** do not use this electric starter under any conditions.
4. **If your home electrical system is grounded,** but a three-hole receptacle is not available, one should be installed by a licensed electrician before using the electric starter.
5. **If you have a grounded three-prong receptacle,** proceed as follows.
6. Move Choke Control to the “Full” position.
7. Push Primer three (3) times, making sure to cover vent hole when pushing.
8. Connect power cord to switch box on dash panel. Plug the other end of power cord into a three-prong 120-volt, grounded, AC receptacle.
9. Push starter button to crank engine.

10. When engine starts, release starter button, and move choke gradually to 1/2 Choke until the engine runs smoothly. Next move Choke to OFF. If engine falters, move choke immediately to FULL and then gradually to 1/2 then to OFF.
11. Disconnect the power cord. **Always unplug from the outlet first, and then from the snow thrower.**

Recoil Starter

1. Move choke lever to FULL choke position (cold engine start).
2. If engine is warm, place choke in OFF position instead of FULL.
3. Push Primer three (3) times, making sure to cover vent hole when pushing.
4. If engine is warm, push primer button only once.

NOTE: Always cover vent hole in primer button when pushing. Additional priming may be necessary for first start if temperature is below 15 degrees Fahrenheit.

5. Grasp starter handle and pull rope out slowly, until it pulls slightly harder. Let rope rewind slowly.
6. Pull starter handle rapidly. Do not allow handle to snap back. Allow it to rewind slowly while keeping a firm hold on the starter handle.
7. As engine warms up and begins to operate evenly, rotate choke lever slowly to the 1/2 Choke position. When the engine begins to run smoothly, move the choke to the OFF position. If engine falters, return to FULL choke, then slowly move to 1/2 then OFF position.

To Stop Engine

1. To stop engine, turn ignition key counter-clockwise. Disconnect the spark plug wire from the spark plug to prevent accidental starting while equipment is unattended.

To help prevent possible freeze-up of starter, proceed as follows:

1. Run engine for a few minutes before stopping to help dry off any moisture on the engine.
2. Electric Starter: Connect power cord to switch box on engine, then to 120 volt AC receptacle. With the engine running, push starter button and spin the starter for several seconds. The unusual sound made by spinning the starter will not harm engine or starter. Disconnect the power cord from receptacle first, and then from switch box.
3. Recoil Starter: With engine running, pull starter rope with a rapid, continuous full arm stroke three or four times. Pulling the starter rope will produce a loud clattering sound, which is not harmful to the engine or starter.
4. Wipe all snow and moisture from the carburetor cover in the area of the control levers. Also, move control levers back and forth several times. Leave choke control in the FULL choke position.
5. Remove ignition key and disconnect spark plug wire to prevent accidental starting.

Operating the Snow Thrower

The pitch of the chute assembly controls the angle at which the snow is thrown.

1. Loosen the wing knob found on the left side of the chute assembly and pivot the upper chute upward or downward to the desired pitch. Retighten the wing knob before operating the snow thrower.
2. Position the chute assembly opening by using the Chute Handle to throw the snow in the desired direction. See Figure 5-2.

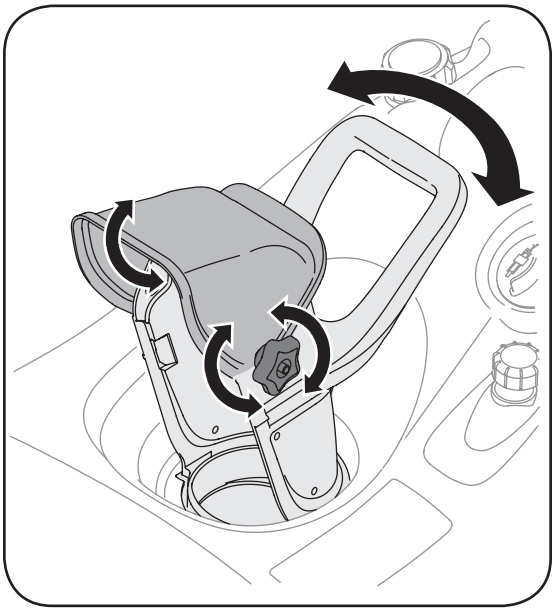


Figure 5-2

Operating Tips

1. Discharge snow downwind whenever possible. Slightly overlap each previously cleared path.
2. Lifting up on the handle will allow the rubber on the augers to propel the snow thrower forward. Pushing downward on the handle will raise the augers off the ground and stop forward motion.

NOTE: Excessive upward pressure on the handle will result in premature wear on the rubber auger blades which would not be covered by warranty.

3. Run the engine for a few minutes before stopping to help dry any moisture on the engine.
4. Clean the snow thrower thoroughly after each use.

WARNING: Muffler, engine and surrounding areas become hot and can cause a burn. Do not touch.

5

Operation

WARNING

WARNING: Muffler, engine and surrounding areas become hot and can cause a burn. Do not touch.

IMPORTANT:
For complete and detailed engine starting, stopping and storing instructions, it is recommended that you read the engine manual also included with this unit .

NOTE:
Excessive upward pressure on the handle will result in premature wear on the rubber auger blades which would not be covered by warranty.

6

Adjustments & Maintenance

WARNING

Disconnect the spark plug wire and ground it against the engine to prevent unintended starting.

NEVER attempt to make any adjustments while the engine is running, except where specified in the operator's manual.

Before servicing, repairing, or inspecting, disengage the control bail and stop engine. Wait until all moving parts have come to a complete stop.

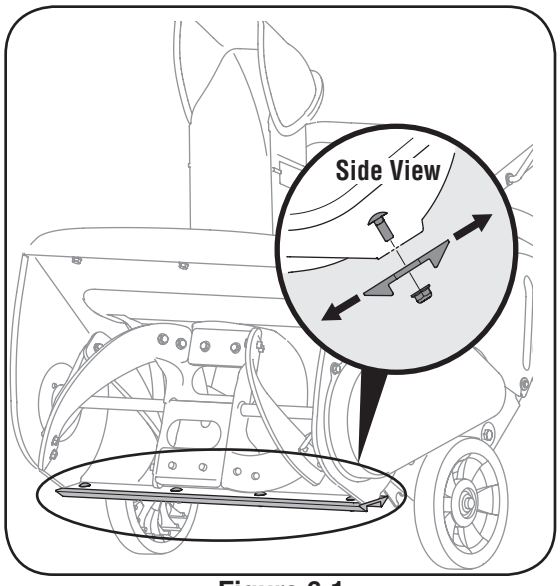


Figure 6-1

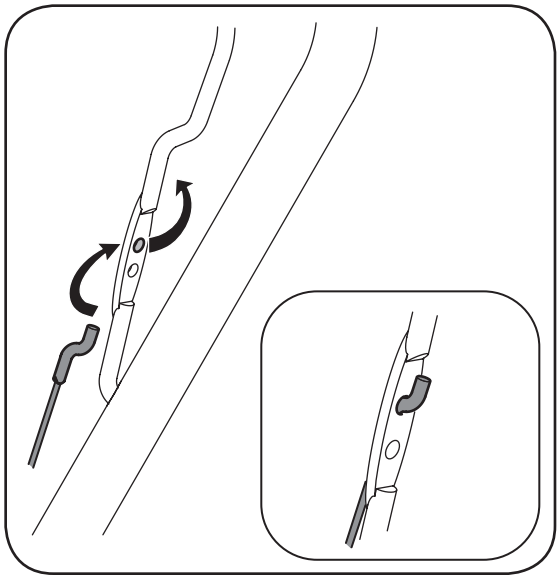


Figure 6-2

WARNING: Disconnect the spark plug wire and ground it against the engine to prevent unintended starting.

WARNING: NEVER attempt to make any adjustments while the engine is running, except where specified in the operator's manual.

Shave Plate

1. To check the adjustment of the shave plate, place the unit on a level surface. The wheels, shave plate and augers should all contact level surface. Note that if the shave plate is adjusted too high, snow may blow under the housing. If the shave plate wears out excessively, or the unit does not self-propel, the shave plate may be too low and needs to be adjusted.

NOTE: On new units or units with a new shave plate installed, the augers may be slightly off the ground.

2. To adjust, tip the snow thrower back so that it rests on the handle. Loosen the four lock nuts and bolts which secure the shave plate to the housing. See Figure 6-1. Move the shave plate to desired position and retighten the nuts and bolts securely.

Replacing Shave Plate

The shave plate is attached to the bottom of the auger housing and is subject to wear. It should be checked periodically. There are two wearing edges and the shave plate can be reversed. Refer to Figure 6-1.

1. Remove the four carriage bolts and hex lock nuts which attach it to the snow thrower housing.
2. Install new shave plate, making sure the heads of the carriage bolts are on the inside of the housing.
3. Adjust the shave plate according to instructions above. Tighten securely once adjusted.

NOTE: Call 1-866-840-6483 for information regarding price and availability of Shave Plate Kit 753-0451 or contact the authorized Troy-bilt Service Dealer in your area.

Control Cable

As a result of both the control cable and the drive belt stretching due to wear, periodic adjustments may be necessary.

If the auger seems to hesitate when rotating while the engine maintains a constant speed, an adjustment is necessary. Proceed as follows:

The upper hole in the control handle provides for an adjustment in cable tension. To adjust, disconnect the end of control cable from the bottom hole in the control handle and reinsert it in the upper hole. Insert the cable from the outside as shown in Figure 6-2. Test the snow thrower to see if there is a noticeable difference.

Carburetor

WARNING: If any adjustments need to be made to the engine while the engine is running (e.g. carburetor), keep clear of all moving parts. Be careful of muffler, engine and other surrounding heated surfaces.

1. Refer to the separate engine manual, packed with your unit, for carburetor adjustment information

Replacing Belt

WARNING: Before servicing, repairing, or inspecting, disengage the control bail and stop engine. Wait until all moving parts have come to a complete stop. Disconnect spark plug wire and ground it against the engine to prevent unintended starting.

Remove the belt cover by removing five hex screws. See Figure 6-3. Then simply pull the belt off by grasping it from the bottom of the auger pulley and pulling off. Once you remove the belt from the pulleys, you can push down on the idler pulley to release the belt from under belt keeper.

To replace the belt follow these instructions and refer to Figure 6-4:

1. Push down on the Idler pulley.
2. Put belt on top of the auger pulley under belt keeper.
3. Thread belt around engine pulley.
4. Push belt over bottom of auger pulley.

Reinstall the belt cover removed earlier.

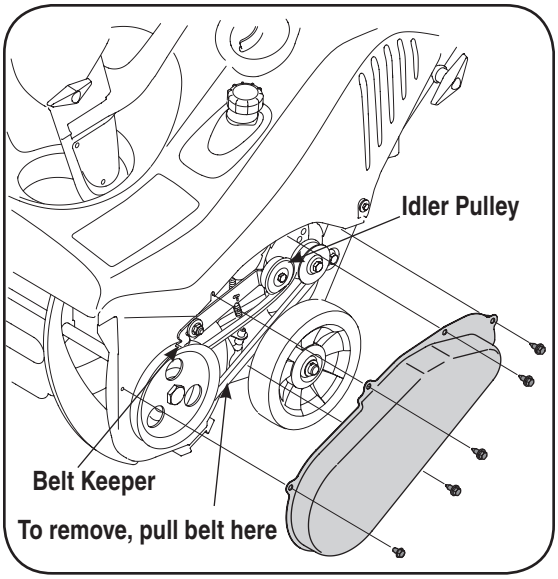


Figure 6-3

Engine

1. Refer to the separate engine manual for all engine maintenance procedures.
2. Check engine and snow thrower frequently for loose hardware, and tighten as needed.

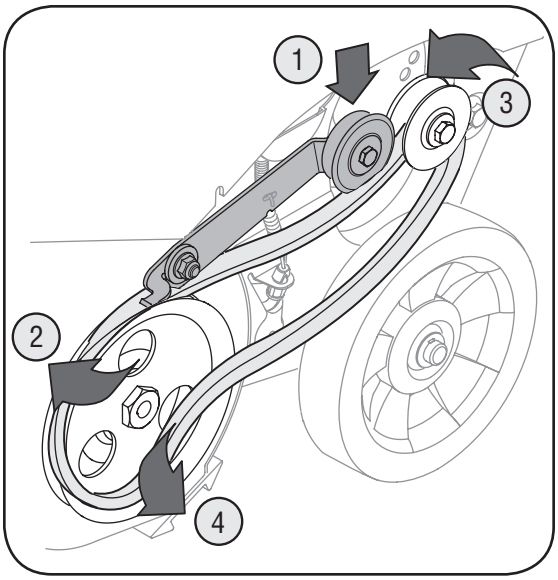


Figure 6-4

Lubrication

Lubricate pivot points on the control handle and the extension spring at the end of the control cable with a light oil once every season and before storage of the snow thrower at the end of the season.

Replacing Auger Paddles

The snow thrower auger's rubber paddles are subject to wear and should be replaced if any signs of excessive wear is present.

IMPORTANT: Do NOT allow the auger's rubber paddles to wear to the point where portions of the metal auger itself can come in contact with the pavement. Doing so can result in serious damage to your snow thrower.

NOTE: Call 1-866-840-6483 for information regarding the price and availability of Auger Kit 753-04472 or contact an authorized Troy-bilt Service Dealer in your area.

To change the rubber paddles, proceed as follows:

1. Remove the existing rubber paddles by unthreading the self-tapping screws which secure them to the auger. See Figure 6-5.
2. Secure the replacement rubber paddles to the auger using the hardware removed earlier.

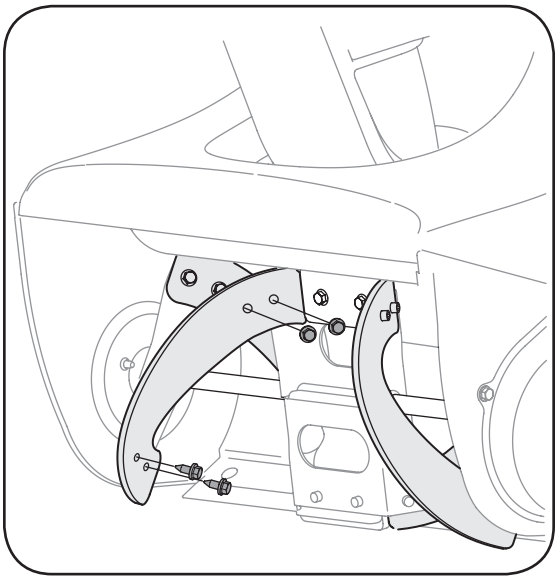


Figure 6-5

WARNING

Before servicing, repairing, or inspecting, disengage the control bail and stop engine. Wait until all moving parts have come to a complete stop. Disconnect spark plug wire and ground it against the engine to prevent unintended starting.

IMPORTANT:
Do NOT allow the auger's rubber paddles to wear to the point where portions of the metal auger itself can come in contact with the pavement. Doing so can result in serious damage to your snow thrower.

7

Off-Season Storage

WARNING

Never store snow thrower with fuel in tank indoors or in poorly ventilated areas, where fuel fumes may reach an open flame, spark or pilot light as on a furnace, water heater, clothes dryer or gas appliance.

Drain fuel into an approved container outdoors, away from any open flame. Be certain engine is cool. Do not smoke. Fuel left in engine during warm weather deteriorates and will cause serious starting problems.

Do not drain carburetor if using fuel stabilizer. Never use engine or carburetor cleaning products in the fuel tank or permanent damage may occur.

If the snow thrower will not be used for 30 days or longer, or if it is the end of the snow season when the last possibility of snow is gone, the equipment needs to be stored properly. Follow storage instructions below to ensure top performance from the snow thrower for many more years.

Preparing Engine

WARNING: Never store snow thrower with fuel in tank indoors or in poorly ventilated areas, where fuel fumes may reach an open flame, spark or pilot light as on a furnace, water heater, clothes dryer or gas appliance.

NOTE: It is important to prevent gum deposits from forming in essential fuel system parts of the engine such as the carburetor, fuel filter, fuel hose or tank during storage.

CAUTION: ***Alcohol blended fuels (called gasohol or using ethanol or methanol) can attract moisture which leads to separation and formation of acids during storage. Acidic gas can damage the fuel system of an engine while in storage.***

To avoid engine problems, the fuel system should be emptied before storage for 30 days or longer. Follow these instructions to prepare your snow thrower for storage:

WARNING: Drain fuel into an approved container outdoors, away from any open flame. Be certain engine is cool. Do not smoke. Fuel left in engine during warm weather deteriorates and will cause serious starting problems.

1. Remove all gasoline from the carburetor and the fuel tank to prevent gum deposits from forming on these parts and harming the engine.
2. Run the engine until the fuel tank is empty and it stops due to lack of fuel.
3. Drain carburetor by pressing upward on bowl drain, located below the carburetor cover.

WARNING: Do not drain carburetor if using fuel stabilizer. Never use engine or carburetor cleaning products in the fuel tank or permanent damage may occur.

NOTE: Fuel stabilizer (such as STA-BIL) is an acceptable alternative in minimizing the formation of fuel gum deposits during storage. Add stabilizer to gasoline in fuel tank or storage container. Always follow mix ratio found on stabilizer container. Run engine at least 10 minutes after adding stabilizer to allow it to reach the carburetor. Do not drain carburetor if using fuel stabilizer.

4. Remove the spark plug and pour one (1) ounce of engine oil through the spark plug hole into the cylinder. Cover spark plug hole with a rag and crank the engine several times to distribute the oil. Replace spark plug.

NOTE: Refer to the engine manual for more information on preparing the snow thrower engine for storage.

Preparing Snow Thrower

1. When storing the snow thrower in an unventilated or metal storage shed, care should be taken to rustproof the equipment. Using a light oil or silicone, coat the equipment, especially any chains, springs, bearings and cables.
2. Remove all dirt from exterior of engine and equipment.
3. Follow lubrication recommendations on page 11.
4. Store equipment in a clean, dry area.

Problem	Possible Cause(s)	
Engine fails to start	1. Fuel tank empty, or stale fuel 2. Blocked fuel line 3. Key not in ON position 4. Spark plug wire disconnected 5. Faulty spark plug 6. Engine not primed 7. Engine flooded from excessive priming	1. Fill tank with clean fresh gasoline. 2. Clean fuel line 3. Insert key and turn to ON position 4. Connect wire to spark plug. 5. Clean spark plug, readjust gap, or replace. 6. Prime engine four times. 7. Wait at least ten minutes before starting.
Engine runs erratic	1. Unit running on choke 2. Fuel line blocked, or stale fuel 3. Water or dirt in fuel system 4. Carburetor out of adjustment	1. Move choke lever to OFF position. 2. Clean fuel line and fill tank with fresh, clean gasoline. 3. Refer to engine manual for remedy. 4. Refer to engine manual for remedy.
Engine overheats	1. Carburetor out of adjustment	1. Refer to engine manual for instruction.
Loss of power	1. Spark plug wire loose 2. Vent in gas cap plugged	1. Firmly connect spark plug wire. 2. Clear vent.
Excessive vibration	1. Loose parts or damaged auger	1. Stop engine immediately and disconnect spark plug wire. Check for possible damage. Tighten all bolts and nuts. Repair as needed. If the problem persists, take unit to an authorized service dealer.
Unit fails to self-propel	1. Drive cable out of adjustment 2. Drive belt loose or damaged	1. Adjust control cable following instructions on page 9 of this manual. 2. Replace drive belt.
Augers continue to rotate	1. Cable out of adjustment.	1. Adjust auger control cable as shown in “Making Adjustments” on page 10.
Unit fails to discharge snow	1. Chute assembly clogged. 2. Shear pin sheared. 3. Foreign object lodged in auger. 4. Auger control cable out of adjustment. 5. Auger belt loose or damaged.	1. Stop engine and disconnect spark plug wire. Clean chute and inside of auger housing with clean-out tool or stick. 2. Replace shear pin. 3. Stop engine immediately and disconnect the spark plug wire. Remove object from auger. 4. Adjust auger control cable. 5. Replace auger belt.

NOTE: For repairs beyond the minor adjustments listed above, contact your nearest authorized service representative or call 1-866-840-6483 for the Customer Support Center. Refer to the engine manual for more engine related information.

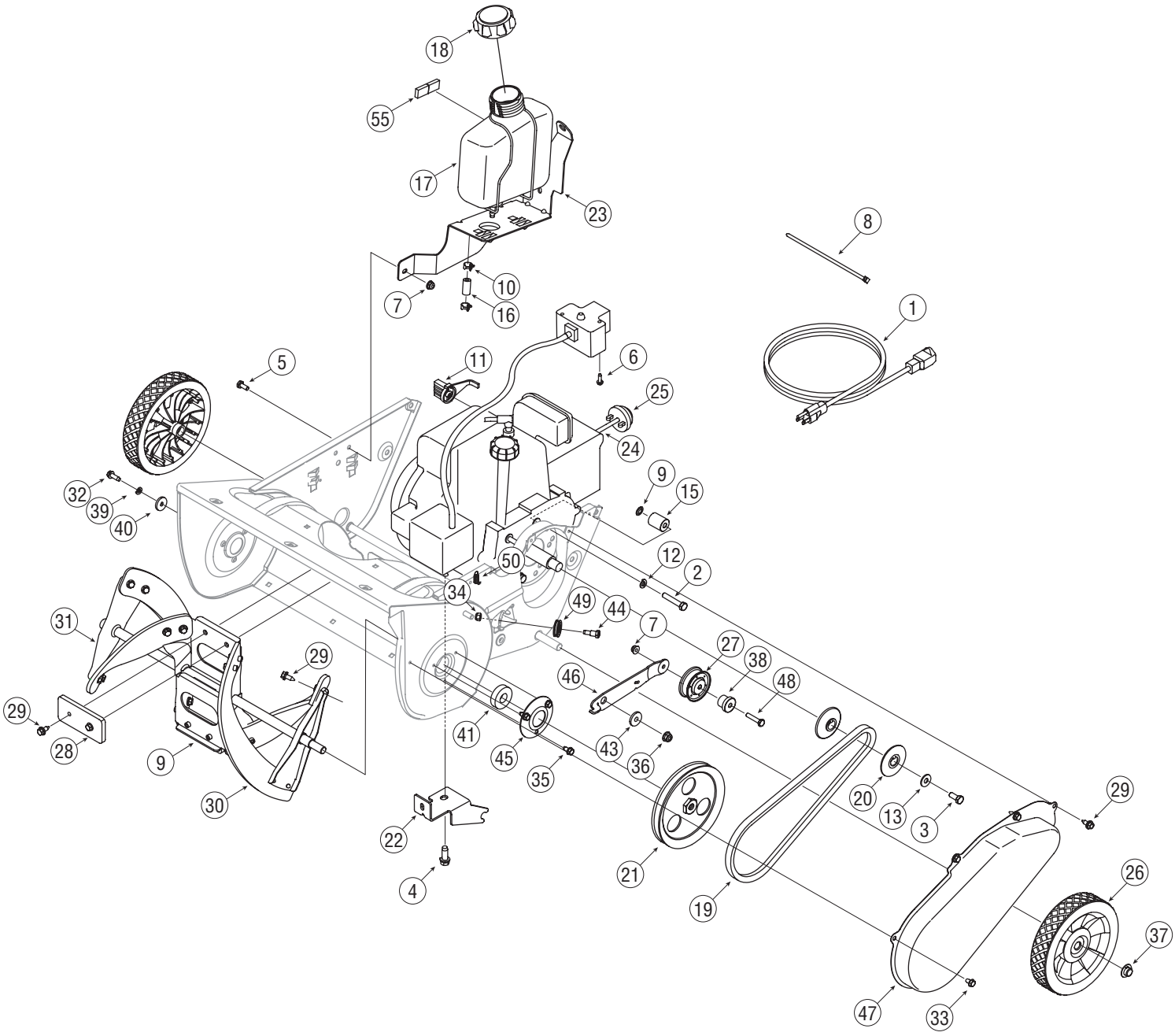
Please do *NOT* return the unit to the retailer from which it was purchased, without first contacting Customer Support.

Log onto www.troybilt.com or call a customer service representative at 1(866) 840-6483 or (330) 558-7220.

NOTE:

You will need the model number and serial number if and when calling Customer Support, logging onto our website and contacting a service dealer. Please refer to page 2 of this manual for information regarding locating and recording your model and serial numbers.

Model 5521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9

Part List: Snow Thrower

REF NO.	PART No.	DESCRIPTION	Qty.
1	629-0071	Extension Cord	1
2	710-0409	Hex Screw, 5/16-24 x 1.75	4
3	710-0627	Hex Screw, 5/16-24 x .75	1
4	710-0654A	Self Tapping Screw, 3/8-16 x 1	2
5	710-0751	Hex Screw, 1/4-20 x .62	1
6	710-1003	Screw, #10-16 x .625	2
7	712-04064	Hex Flange Lock Nut, 1/4-20	9
8	726-0154	Push Mount Cable Tie	1
9	684-04228	Auger Assembly	1
10	726-0205	Clamp, Hose	2
11	731-2825	Knob, Choke	1
12	736-0119	Washer, Lock 5/16	4
13	736-0242	Flat Washer .340 x .872 x .060	1
14	747-04236	Gas Tank Support Wire	1
15	750-04297B	Spacer, Engine	4
16	751-0535	Hose, Fuel Line	18
17	751-10023	Tank, Fuel	1
18	751-10278	Cap, Fuel	1
19	754-0101A	V-Belt, 1/2	1
20	756-0416B	Pulley Half, .625 ID x 2.25 OD	2
21	756-04232	Pulley, 1/2 x 6.0 OD	1
22	790-00216	Bracket, Engine	1
23	790-00134	Bracket Support Gas Tank	1
24	7511152847	Primer Hose Line	4
25	7512B1476	Primer	1
26	734-04204	Wheel 5 Lug Diamond Design	2
	734-04063	Wheel 7 x 1.5 STAR Gray	2

REF NO.	PART No.	DESCRIPTION	Qty.
27	684-04168	Idler Pulley (1/4" hole)	1
28	735-04033	Rubber Paddle	2
29	710-0896	Hex Screw, 1/4-20 x .62	24
30	735-04032	Cresent Spiral	4
31	684-04228	Auger Assembly	1
32	710-0642	Hex Screw 1/4-20 x .75 Gr. 5	1
33	710-0653	Self-tapping Screw 1/4-20 x .375	1
34	712-0896	Hex Lock Nut 1/4-28	1
35	710-0352	Self-tapping Screw, 1/4-14 x .375"	6
36	712-04063	Hex Flange Lock Nut, 5/16-18	1
37	726-0299	Push Cap, 1/2"	2
38	750-04571	Shoulder Spacer .260 x .785 x .538	1
39	736-0329	Lock Washer, 1/4	1
40	736-0176	Flat Washer .265 x .938 x .120	1
41	741-04188	Ball Bearing .625 x 37 x 12	2
42	684-04227	Auger Assembly Housing	1
43	748-0234	Shoulder Spacer .25	1
44	738-0924A	Carriage Screw 1/4-28	1
45	790-00249	Bearing Cup	2
46	790-00238	Idler Brkt. w/ brake (Pulley hole 1/4")	1
47	790-00045A	Belt Cover	1
48	710-0106	Hex Screw, 1/4-20 x 1.00 Gr. 5	1
49	756-0625	Cable Roller	1
50	732-0357A	Extension Spring	1

NOTES: For a proper working machine, use Factory Approved Parts. V-belts are designed to engage and disengage safely. A substitute (non OEM) V-belt can be dangerous by not disengaging completely.

NOTE: Snow thrower features/components vary by model. NOT all parts listed above and pictured on the previous page are standard equipment.

MTD GENUINE FACTORY PARTS

For parts and/or accessories please call 1-866-840-6483, or 1-330-558-7220.
www.troybilt.com

NOTE:
For painted parts, please refer to the list of color codes below. Please add the applicable color code, wherever needed, to the part number to order a replacement part. For instance, if a part numbered 700-xxxx is painted powder black, the part number to order would be 700-xxxx-0637.

Troybilt Red - 0638
Black - 0637

9

Part List: Snow Thrower

For parts and/or accessories please call 1-866-840-6483, or 1-330-558-7220.
www.troybilt.com

NOTE:
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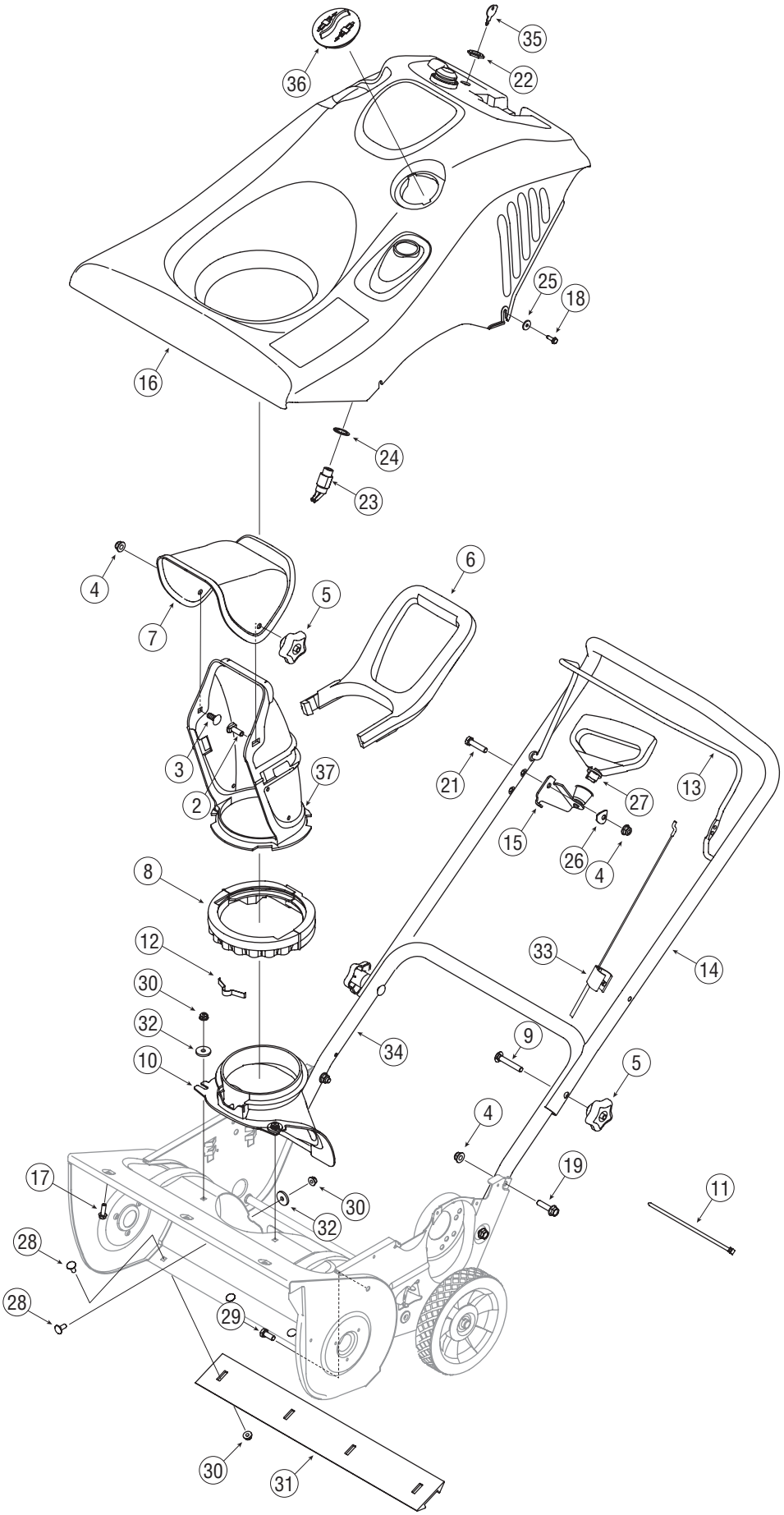
For instance, if a part numbered 700-xxxx is painted powder black, the part number to order would be 700-xxxx-0637.

Troybilt Red - 0638
Black - 0637

Model 5521



REF NO.	PART NUMBER	DESCRIPTION	Qty.
1	684-04127	Chute Assembly (Incl. Ref. 37-41)	1
2	710-04071	Carriage Bolt 5/16-18 x 1.0”	1
3	710-0451	Carriage Bolt 5/16-18 x 0.750”	1
4	712-04063	Flange Lock Nut, 5/16-18	6
5	720-04072	Star Knob Assembly	1
6	731-04388A	Chute Handle	1
7	731-04426A	Upper Chute	1
8	731-04353	Ring-Lower Chute	1
9	710-04532	Carriage Bolt 5/16-18 x 2.0 Gr. 5	2
10	731-04886	Chute, Adapter 5” Dia	1
11	725-0157	Cable Tie	1
12	732-04111	Chute Adjustment Spring	1
13	747-04159	Bail, Gull Wing	1
14	749-04106	Upper Handle, Gull Wing	1
15	684-0178	Mitten Grip Bracket	1
16	684-04029	Shroud Assembly, Black *(Incl. Spark Plug Cover)*	1
17	710-0895	Screw, 1/4-15 x .75	3
18	710-1003	Self-tapping Screw, #10-16 x .625”	5
19	710-1090	Hex Flange Screw, 5/16-18 x 1.25	2
20	710-1882	Hex Flange Screw 5/16-18 x 1.50 Gr. 5	2
21	710-3083	Hex Screw, 5/16-18 x 1.375	1
22	712-0252	Hex Nut 5/8-32 x .12 Special	1
23	725-2018	Key Switch-Electric Start	1
24	736-0225	Lock Washer Internal .625 x 1.058	1
25	736-0400	Flat Washer .194” x .62” x .063	5
26	736-0451	Saddle Washer .320 x .93	1
27	7510009636	Recoil Handle, Mitten	1
28	710-0134	Screw, 1/4-20 x .62	8
29	710-3008	Truss Machine Screw, 5/16-18 x .75	1
30	712-04064	Hex Flange Lock Nut, 1/4-20	9
31	731-1033	Shave Plate, 19.88	1
32	736-0176	Flat Washer .265 x .938 x .120	4
33	746-04237	Control Cable	1
34	749-04114	Lower Handle	1
35	725-0201	Ignition Key	2
36	684-0189	Spark Plug Cover	1
37	731-04127	Lower Chute 5” Dia.	1

Part List: Snow Thrower

MTD For A Growing World. GENUINE FACTORY PARTS

For parts and/or accessories please call 1-866-840-6483, or 1-330-558-7220.
www.troybilt.com

NOTE:
For painted parts, please refer to the list of color codes below. Please add the applicable color code, wherever needed, to the part number to order a replacement part.

For instance, if a part numbered 700-xxxx is painted powder black, the part number to order would be 700-xxxx-0637.

Troybilt Red - 0638
Black - 0637

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Accessories & Kits

For parts and/or accessories please call 1-866-840-6483, or 1-330-558-7220.
www.troybilt.com

The following accessories and kits are available for single-stage snow throwers. See the retailer from which you purchased your snow thrower, an authorized Troybilt Service Dealer or phone (866) 840-6483 for information regarding price and availability.

MODEL	DESCRIPTION
OEM-390-986	Electric Start Kit *(fits models with a four-cycle Tecumseh 4 HP or 5 HP engine)*
OEM-737-0209	MTD 4-cycle Snow Thrower Oil *Premium 4-cycle snow thrower oil, SAE 5W30, 20oz. easy pour bottle*
OEM-754-0101A	Snow Thrower Auger Belt
753-0451	Shave Plate *(includes replacement shave plate and hardware)*
753-04472	Rubber Auger Kit, Snow Thrower Single Stage

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NOTES:

Use this page to make notes and write down important information.

For parts and/or accessories please call 1-866-840-6483, or 1-330-558-7220.

www.troybilt.com

MANUFACTURER'S LIMITED WARRANTY FOR

TROY-BILT®

The limited warranty set forth below is given by Troy-Bilt LLC with respect to new merchandise purchased and used in the United States, its possessions and territories.

"Troy-Bilt" warrants this product against defects in material and workmanship for a period of two (2) years commencing on the date of original purchase and will, at its option, repair or replace, free of charge, any part found to be defective in materials or workmanship. This limited warranty shall only apply if this product has been operated and maintained in accordance with the Operator's Manual furnished with the product, and has not been subject to misuse, abuse, commercial use, neglect, accident, improper maintenance, alteration, vandalism, theft, fire, water, or damage because of other peril or natural disaster. Damage resulting from the installation or use of any part, accessory or attachment not approved by Troy-Bilt for use with the product(s) covered by this manual will void your warranty as to any resulting damage.

Normal wear parts are warranted to be free from defects in material and workmanship for a period of thirty (30) days from the date of purchase. Normal wear parts include, but are not limited to items such as: batteries, belts, blades, blade adapters, grass bags, rider deck wheels, seats, snow thrower skid shoes, shave plates, auger spiral rubber and tires.

HOW TO OBTAIN SERVICE: Warranty service is available, WITH PROOF OF PURCHASE, through your local authorized service dealer. To locate the dealer in your area, check your Yellow Pages, or contact Troy-Bilt LLC at P.O. Box 361131, Cleveland, Ohio 44136-0019, or call 1-866-840-6483 or 1-330-558-7220, or log on to our Web site at www.troybilt.com.

This limited warranty does **not** provide coverage in the following cases:

a. The engine or component parts thereof. These items may carry a separate manufacturer's warranty. Refer to applicable manufacturer's warranty for terms and conditions.
b. Log splitter pumps, valves, and cylinders have a separate one year warranty.
c. Routine maintenance items such as lubricants, filters, blade sharpening, tune-ups, brake adjustments, clutch adjustments, deck adjustments, and normal deterioration of the exterior finish due to use or exposure.
d. Service completed by someone other than an authorized service dealer.
e. Troy-Bilt does not extend any warranty for products sold or exported outside of the United States, its possessions and territories, except those sold through Troy-Bilt's authorized channels of export distribution.
f. Replacement parts that are not genuine Troy-Bilt parts.
g. Transportation charges and service calls.

No implied warranty, including any implied warranty of merchantability of fitness for a particular purpose, applies after the applicable period of express written warranty above as to the parts as identified. No other express warranty, whether written or oral, except as mentioned above, given by any person or entity, including a dealer or retailer, with respect to any product, shall bind Troy-Bilt. During the period of the warranty, the exclusive remedy is repair or replacement of the product as set forth above.

The provisions as set forth in this warranty provide the sole and exclusive remedy arising from the sale. Troy-Bilt shall not be liable for incidental or consequential loss or damage including, without limitation, expenses incurred for substitute or replacement lawn care services or for rental expenses to temporarily replace a warranted product.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions or limitations may not apply to you.

In no event shall recovery of any kind be greater than the amount of the purchase price of the product sold. **Alteration of safety features of the product shall void this warranty.** You assume the risk and liability for loss, damage, or injury to you and your property and/or to others and their property arising out of the misuse or inability to use the product.

This limited warranty shall not extend to anyone other than the original purchaser or to the person for whom it was purchased as a gift.

HOW STATE LAW RELATES TO THIS WARRANTY: This limited warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

IMPORTANT: Owner must present Original Proof of Purchase to obtain warranty coverage.

TROYBILT LLC, P.O. BOX 361131 CLEVELAND, OHIO 44136-0019; Phone: 1(866) 840-6483, 1-330-558-7220